

Fact Sheet

Water Supply Well Construction

April 2011

Ontario's Wells regulation (O. Reg. 903) sets standards for constructing a water supply well and licensing requirements for contractors and technicians constructing wells. These requirements are part of a multi-barrier approach to protect groundwater and drinking water. The requirements that a person constructing a new water supply well must meet include:

Depth: The well must be at least six metres deep. If the only useful source of groundwater is less than six metres below ground surface, the well must be at least three metres deep.

Casing: A well must have a watertight casing (e.g. pipe) made of new material. The casing is installed inside the hole and prevents the ground from collapsing into the hole.

Sealing around the casing: Sealing material must be placed around the outside of the casing to reduce the risk of the well acting as a pathway for contaminants.

Development: Drilling fluids and other materials introduced during the construction of the well must be removed from the well water by surging the well.

Disinfection: The well water must be disinfected.

Well cap or cover: Depending on the type of well, it must be covered with either a watertight cover or a manufactured vermin-proof well cap.

Venting: A well must be vented to ensure any dangerous gases are safely dispersed.

Yield test: The well must be pumped at a constant rate and, in most cases, water levels must be measured to determine the amount of water the well can supply.

Information: After construction, an information package and a one-litre sample of the well water (for visual examination) must be given to the well purchaser unless otherwise directed. The depth of the well must also be measured in the presence of the well purchaser unless otherwise directed.

Notification: The well purchaser and the owner of the land must be notified if mineralized water (e.g. salty or sulphate rich water), natural gas or other gas is detected. The Ministry of the Environment must also be notified if natural gas or other gas is detected in a well.

Well record: A record of the well construction and information on general water quantity and quality must be completed. Copies of the well record must be provided to the well purchaser, owner of the land and the Ministry of the Environment as required by the Wells regulation.

Well tag: A well tag obtained from the Ministry of the Environment must be permanently attached to the well casing or another structure associated with the well and must be visible.

The well tag links the well record with the well.

A person who installs a pump in a water supply well must meet the above notification, venting, well cap or cover, well tag and disinfection rules.

Other rules that the person who installs a pump must follow include:

- underground connections to the casing such as waterlines must be made watertight
- all equipment installed in the well must be clean
- an information package must be provided to the well purchaser unless otherwise directed.

See the technical bulletins listed below for detailed information on these and other requirements for constructing a new water supply well.

Learn More

- [Technical Bulletin: Wells Regulation – New Construction of the Hole, Casing, Well Screen and Annular Space](#)
- [Technical Bulletin: Wells Regulation – Completing the New Well's Structure](#)
- [Technical Bulletin: Wells Regulation – Well Repairs and Other Alterations](#)
- [Technical Bulletin: Wells Regulation – Well Disinfection](#)
- [Water Supply Wells – Requirements and Best Management Practices](#)
- [Wells regulation](#)
- [Ontario Water Resources Act](#)

Contact Us

Public Information Centre (PIC)
Ministry of the Environment
Tel: 1-800-565-4923 or 416-325-4000
E-mail: picemail.moe@ontario.ca

Notice: This fact sheet is being provided for information purposes only and is not intended, nor should it be construed as providing legal advice in any circumstances. The applicable legislation including the Ontario Water Resources Act and Regulation 903, as amended and made under that Act, should be consulted. Legislation and regulations change from time to time so it is essential that the most current versions be used.

PIBS 8183
ISBN 978-1-4435-5001-7